

*F1*  
*Consider*

(a) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 2;

(b) a nucleotide sequence shown by SEQ ID NO: 1;

(c) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 4;

(d) a nucleotide sequence shown by SEQ ID NO: 3; and

(e) a nucleotide sequence encoding an amino acid sequence of about a 4.4 Kbp gene obtainable from a plant, wherein said gene of about 4.4 Kbp is amplifiable with a combination of a PCR primer selected from the group consisting of SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 13 and a PCR primer selected from the group consisting of SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 14, and SEQ ID NO: 15.

*F2*

Claim 20. (Twice Amended) The isolated polynucleotide according to claim 18, which is isolated from maize plant (*Zea mays L*).

Claim 21. (Three times Amended) The isolated polynucleotide according to claim 19, which is isolated from maize plant (*Zea mays L*).

Claim 22. (Twice Amended) A plasmid comprising a polynucleotide encoding an aldehyde oxidase enzyme, wherein said

wherein said polynucleotide has a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 2;

(b) a nucleotide sequence shown by SEQ ID NO: 1;

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(c) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 4;

(d) a nucleotide sequence shown by SEQ ID NO: 3; and

(e) a nucleotide sequence encoding an amino acid sequence of about a 4.4 Kbp gene obtainable from a plant, wherein said gene of about 4.4 Kbp is amplifiable with a combination of a PCR primer selected from the group consisting of SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 13 and a PCR primer selected from the group consisting of SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 14, and SEQ ID NO: 15.

*F3*

Claim 25. (Amended) The transformed host cell according to claim 23, wherein the host cell is a plant cell.

*F4*

Claim 26. (Twice Amended) A process of constructing an expression plasmid which comprises ligating in a functional manner

(1) a promoter capable of functioning in a plant cell upstream from,

(2) a polynucleotide encoding an aldehyde oxidase enzyme, wherein said enzyme oxidizes an aldehyde compound to a carboxylic acid, and wherein said polynucleotide has a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 2;

(b) a nucleotide sequence shown by SEQ ID NO: 1;

(c) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 4;

(d) a nucleotide sequence shown by SEQ ID NO: 3; and

(e) a nucleotide sequence encoding an amino acid sequence of about a 4.4 Kbp gene obtainable from a plant, wherein said gene of about 4.4 Kbp is amplifiable with a combination of a PCR primer selected from the group consisting of SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 13 and a PCR primer selected from the group consisting of SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 14, and SEQ ID NO: 15, and

(3) a terminator functional in a plant downstream from the polynucleotide (2).

Claim 27. (Twice Amended) An expression plasmid comprising:

(1) a promoter capable of functioning in a plant cell,

(2) a polynucleotide encoding an aldehyde oxidase enzyme, wherein said enzyme oxidizes an aldehyde compound to a carboxylic acid, and wherein said polynucleotide has a sequence selected from the group consisting of:

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cont'd*

- (a) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 2;
- (b) a nucleotide sequence shown by SEQ ID NO: 1;
- (c) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 4;
- (d) a nucleotide sequence shown by SEQ ID NO: 3; and
- (e) a nucleotide sequence encoding an amino acid sequence of about a 4.4 Kbp gene obtainable from a plant, wherein said gene of about 4.4 Kbp is amplifiable with a combination of a PCR primer selected from the group consisting of SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 13 and a PCR primer selected from the group consisting of SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 14, and SEQ ID NO: 15, and

(3) a terminator capable of functioning in a plant which are ligated in a functional manner and in the order described above.

Claim 28. (Twice Amended) A process for controlling production of an aldehyde oxidase in a transformed host cell which comprises

introducing into a host cell an expression plasmid comprising:

(1) a promoter functional in a plant cell upstream from,

(2) a polynucleotide encoding an aldehyde oxidase enzyme, wherein said enzyme oxidizes an aldehyde compound to a carboxylic acid, and having a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 2;

(b) a nucleotide sequence shown by SEQ ID NO: 1;

(c) a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO: 4;

(d) a nucleotide sequence shown by SEQ ID NO: 3;

and

(e) a nucleotide sequence encoding an amino acid sequence of about a 4.4 Kbp gene obtainable from a plant, wherein said gene of about 4.4 Kbp is amplifiable with a combination of a PCR primer selected from the group consisting of SEQ ID NO: 7, SEQ ID NO: 8, and SEQ ID NO: 13 and a PCR primer selected from the group consisting of SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 14, and SEQ ID NO: 15, and

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(3) a terminator functional in a plant and downstream from the polynucleotide (2), which are ligated in a functional manner to transform said host cell whereby the production of aldehyde oxidase of the transformed host is controlled.

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Please add the following new claims:

*15*  

--31. (New) An isolated polynucleotide encoding an aldehyde oxidase enzyme, wherein said polynucleotide has a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO:2. *W*

*15*  

--32. (New) An isolated polynucleotide encoding an aldehyde oxidase enzyme, wherein said polynucleotide has a nucleotide sequence encoding an amino acid sequence shown by SEQ ID NO:4. --

*W*  

--33. (New) An isolated polynucleotide encoding an aldehyde oxidase enzyme, wherein said polynucleotide has a nucleotide sequence shown by SEQ ID NO: 1 or 3. *W*

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